

U.S. Patent Application Serial No. 10/829,010
Reply to Office Action of January 4, 2007

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1-19. (Canceled)

20. (Currently amended) A method for reducing shrinkage during sintering low-temperature-cofired ceramics, the ceramics comprising a dielectric portion and a heterogeneous material portion, the method comprising the steps of:

(a) providing a monolithic structure, the monolithic structure comprising:

a dielectric body comprising at least one dielectric layer that comprises at least one active area; wherein said active area is disposed with at least one heterogeneous material pattern, and said heterogeneous material pattern comprises at least one heterogeneous material component and/or module; and

a constraining layer positioned on the top of the dielectric body, the constraining layer comprising at least one window and wherein the edge of the active area of the dielectric layer each falls within the window in vertical direction; wherein the constraining layer positioned on the top of the dielectric body is a low sintering temperature constraining layer with a sintering temperature lower than that of the dielectric layer and comprises about 1 wt% to about 10 wt% of a strong auxiliary component to lower the sintering temperature of the constraining layer;

(b) firing the monolithic structure; and

(c) singulating the monolithic structure along a cutting line to provide the low-temperature-cofired ceramics, wherein the cutting line is disposed in the area formed between the edge of the window and the edge of the active area.

21. (Original) The method according to Claim 20, wherein the strong auxiliary component is vanadium oxide.

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22-69. (Canceled)

70. (Currently amended) The method according to Claim 20, wherein the constraining layer comprises about 1 wt% to about 10 wt% of bonding glass.

71. (Currently amended) The method according to Claim 70, wherein the constraining layer comprises about 1 wt% to about 6wt% of bonding glass.

72-73. (Canceled)